Property of W.V. DNR; W.M.S.

Address 1356 HANSFORD St.
CHARLESTON, WV 25301

Telephone 304-348-5393

This Book is manufactured of a High Grade 50% Rag Paper having a Water Resisting Surface, and is sewed with Nylon Waterproof Thread.

INDEX

Equipment Check List:

1. HNU or OVA
2. Camera and extra film
3. Hard Hat
4. Safety Glasses
5. Log Book
6. Clip Board

Jan, 20, 1992

Arrived @ 9:45 AM

State personnel:

Inco's personnel met with us for an opening meeting. There a video about Inco International, Inc. was shown to us. A.S. Tabbi answered Inco's personnel questions

about this visit and RFA in general.

D009 - Hg (mercury) was generated in the lab. The generated sludge is sent off most for reclaiming mercury.

D009 - very small quantity of mercury was generated last month.

D008 - lead - was also in the lab waste generated.

Nick will look up records.

F001 - F002. 11-1 - Trichloroethane (1-1-1 TCE)

[illegible] picture B-83-30

[illegible] in Part B application

will [illegible] a copy of

[illegible] note on description

of the unit reported in

Part A application dated

9-9-82.

1-20-92 03

Storage Drums Area:

Cell #1, #2, #3

The final Part A application

was submitted on 9-9-82.

Groundwater monitoring has been
bit and work will began soon.

Dave Channey with W.R.C.'s
NPDES office has requested
the monitoring program.

1-20-92 01

Drum storage area - Cell #1, has a steel pan with (4) I beams to store drums and pan is used as secondary containment. This storage area has a asphalt base of one foot thick. This asphalt base is placed on concrete slab of at least 6" thick.

Cell #2 has same description Cell #1 is used for non-ignitable waste.

Drums in the area of cell #1 cell #3 and other drum storage area are moved by drum Rigger and fork lifts.

Drums are fabricated of steel grade 17E, 17H DOT inspected drum.

Cell #2 was empty at the time of this visit.

Cell #3 - Store solid H.W. Toxic metals drums were placed on Plat and fastened by metal strip. D Rums were in good Condition Any accumulated water in the steel Pan is discharged to the City of Huntington POTW. Prior to discharge Waste water accumulated is inspected for any sign of Contamination.

1-20-92 06

Kolene Salt Bath Sludge

Contains (2) 55 gal drums.

Also there is a New waste storage area for any Unknown hazardous waste generated.

All the areas described above are Concrete slab.

Equalization Tanks located on N.E. end of the Plant are 5,000 gallon each used to equalize incoming waste water. Sulfuric Acid is used for neutralization Process.

waste water treatment Unit Contains:

(4) Reactors Tanks.

Chrom contaminated waste water is treated seperately from the contact cooling water. facility has two parallel waste water treatment units. The waste water treatment (reactors areas) has a curbed slab and drainage for clean up of spill flows. This washed waste will be returned to head start Point

of waste water treatment Plants.

2 Chemical Tanks are in the S. W. Corner of the building.

1. Sodium Hydroxide Solution.
2. $FeCl_2$ Ferrous Chloride

These chemicals are used in the treatment process.

2 clarifiers have concrete bases and are in new condition.

1-20-92 05

Cold Draw area.

Cold Draw dye check area, Run test draw tubing for crack. Upon completion of dye check wipe it with 1-1-1 TCE. this is a drum satellite storage area 3-4 drums per year is generated. the entire area of the cold draw operation Building has concrete slab.

Pickling area contains 9 (nine) tanks used for pickling of products

2-d satellite storage area, contains 2 drums. Chlorothene and Kerosene was stored in these drums.
The Chlorothene is known as Cold Clean.

Drums were closed and in good condition. One drum per year is generated.

West Pickel House

is considered as 90 day storage.

Kolene salt bath generates Kolene salt sludge. The sludge and solution are at 900°F at the time of operation

1-20-92

Drum sludge is stored for 90 days and then disposed of to South Carolina, Pinewood.

* Need more information

Acid reclaim oxide was spilled in the Acid reclaim area (metals are reclaimed)

at exit door near roasting furnace. The spill area is 30' X 30'. Sampling of soil is conducted by Tardine

The spent acid Tank - Main. de Tank, (5000 gallons). The bricks are coated with white lead. (see MSDS).

The discharging hose is

raised up and Exhibit the 2nd time to assure it is empty of any waste. This is the permitted limit.

ACID RECLAIM PRETREATMENT Units

Natural ~~Aging~~ Aging Tank - is 7- to 8,000 gallons tank it is used a temp. waste received from K-Y plant is neutralized. This tank the waste is pumped to the wastewater treatment plant. waste is received every one a month from in plant and every other month from K-Y plant.

This is a "holding Tank"

Nitric HF Tank is removed from service as of this date. It had a Concrete Tank as Secondary Contained tank system. HF tank is constructed of Fiberglass. Waste is Pumped by a Steam siphon Pump manualy. the operater turn the Pump on and watch for the level of waste in the Neutralizer tank. Pump is shut off when the level is reached.

1-21-92

2nd DAY of RFA, VSI

Unit Parameters

Waste Management Sector Personnel:

1. A. S. Talab
2. Wayne Wilson
3. Talal Fathalah

IngA. International Personnel:

1. Joe
2. Harry
3. Mike

Acid Reclaim Pretreatment Unit is located in ~~Southern~~ Central sector of the plant near ~~office building~~ C.D. Griding.

Acid Reclaim Pretreatment was built in 1940, and Rinsewater Pretreatment plant was built in 1977.

The Final Treatment plant was built in 1988.

The satellite drum storage area is for purpose of generating enough waste to be trucked to permitted drum storage area for off site disposal. The satellite drum storage are are not fixed locations however, most all of them are located on the Concrete surface.

The Mound, 55,000 gallon tk has no history of overflow.

Pickle Rinsewater Pre-treatment Plant:

the equalization tank, 45,000 gallon, has a concrete dike built around it, and placed on concrete base with asphalt surrounding it. no sign of spill or overflow. there is a dike of asphalt around the top of ledge from the clarifier to this unit goes to 3 storage tank labeled Sludge Dewatering Tanks.

The roasted chrome is recovered and sent to Canada for metal recovery. The spill incident in the Acid Reclamation was due to rainwater wash from Chrom Rec

Roasted oxide holding tank which leaked to ground.

The secondary containment of sludge holding, dewatering tank, asphalt, is 6" deep for facility as present.

The 1500 gallon sludge holding tank will be removed and replaced with a polymer sludge dewatering tank that must be in service in mid 1990. The permanent tank will have concrete dikes and secondary containment.

The water recovered from sludge is directed to mixed storage tank. There are evidence of sludge build up in the East section of containment area of sludge holding tanks. 2(5000 gallon)

There are number of evidence of contaminated soil around the rim of the mixed storage tank. Soil is discolored, yellowish green

A holding tank of hazardous waste on the rail in Acid reclaim area developed a leak which released a plume of waste in the area on ground. Remedial action is scheduled and is going on.

Equalization tank has a concrete ring for secondary containment of over flows. Also the floor is concrete with Asphalt topping. Inside concrete is min 8" and 10" outside of all areas. most of All over flows are directed over asphalt

Two 450,000 gall Equalizing Tank

[illegible] (Carbon[illegible])
sludge to furness.
[illegible] the chats.

[illegible] of considerable
[illegible] was discovered
[illegible] the removed Nitric
[illegible] tank. ~~&~~ The Nitric
[illegible] tank was located in
[illegible] Acid Reclaim
[illegible] Treatment Area. The
[illegible] was discovered
during inspection by Talal
[illegible] and a picture was
taken. (Refer to Photo-log).

filter press, presses the sludge and sent it to reslurry unit and water is added for reslurry propose. The reslurry area has concrete floor. in case when furness is not operating, sludge is held in a a three sided container and then shelved on a belt which takes it to reslurry tank and then pumped to the furness.

~~dewater~~ pressed sludge is 70 % solid and 30% water, when it is reached reslurry tank to be pumped to furness. The sludge has passed TCLP test and it's not a hazardous waste by characteristic.

Liquid waste Pretreatment tank has a concrete base and earthen secondary containment. process are latched in by operator manually and tank has high level alarm. no history of overflow. the pump houses next to tank pump directly at [illegible] to waste water treatment plant.

Filter press in the final waste water treatment plant has concrete base and catch basin around the press. dewatered sludge is placed in the trailer that takes dewatered sludge to the Huntington ~~sludge~~ solid waste landfill. TCLP indicated no hazardous characteristic in sludge.

effluent to Huntington POTW goes to effluent monitoring Bosh tank and then discharge to POTW sewer system

Bosh tank is a holding tank for sampling of effluent prior to discharge to POTW.

Method drum is located in strip mill, has concrete floor and collection pan. Drum steel is located within the pan which also contains absorbent gravel.

Storm sewer system discharge directly to City of Huntington POTW. The storm sewer system is a network thru out the plan.

Kolene salt bath in the C.A.P. line in Strip mill area, shop. The salt is drained and removed to drum storage area for disposal.

Soluble oil strip - Contaminated water is processed for oil recovery that is ~~drained~~ and removed from site by Hertzog Company, (see Disposal Paper work). The S. oil strip is contained within a steel pan with 6" rim. water process in this strip goes to W.W. Treatment plant where recovered oil is ~~stored~~ drummed for offsite disposal. The area in strip mill and S. oil strip is concrete.

The soluble oil 2tore was Earthen in 1988. Tank of storage of recovered oil has concrete secondary containment with 6" brim around it. The sump are pumped back to R.oil storage tank.

Primary mill drill press area generate one drum of Hazard waste per year. The waste generated is 1-1-1 TCE. The floor of storage area is concrete.

Inside the primary mill there is a sattalite drum storage area with concrete floor. The waste generated is 1-1-1-TCE, too.

Old lagoon No 2 is located on N. west corner of plant and is vacant. It has soil floor (cover). No building and/or concrete cap is existing.

the approx. area of the drain 25'X 50'. it was drain 6-'4 deep.
The west Tailing Pond area had the size of 200'X 300'; that Corporate was ~~[illegible]~~ Part of the primary mill buildings and Lagoon No. 2.

There are 4 monitoring groundwater wells installed in the ~~[illegible]~~ New ~~waste~~ west Tailing Pond area. This Pond has Permit under Clean Water act by W.R.S.

The Diesel fuel storage tank in the primary mill Area.

The old landfill No. 1 is located within center of N. west area of the Plant.

the corner of landfill were the south east corner of primary mill [illegible] and N.W. corner of [illegible] melting.

The baghouse dust permitted area was closed and certificate was submitted. The area is used for storage of bagged products. It has a metal roof and concrete floor and three sides bricks walls.

Sattelite drum storage area.

Burn , K.X Plant Bag house dust is recieved by Huntington plant. 3-4 drums per month. These waste are used in nickel heat process. The whole drum and contained waste are placed in the nickel heat and recycled. This process is done for metal reclaiming purposes. The waste in these drums are waste [illegible]

Barium Chloride salt was used in the heating tanks in this area. Facility Representative informed us that the Barium Chloride is not used any more. However, the sign on the tanks indicates Barium Chloride

The lagoon No. 1 was located in the Northern Central section of the Plant.

The old Lagoon No 1 is the area of Liquid waste equalization Pretreatment tank. This tank is erected in the old Lagoon area.

The exist meeting was held at 3:15 PM on this date 1-21-92.

1-22-92

Arrived @ 9:20 AM

opening meeting started @ 9:30 AM

Waste Management Section 5

Personnel:

1. A.S. Talebi
2. Talal Fathalah
3. Wayne Wilson

Ingee Alloy International, Inc.

1. Skip Hasty
2. Harly
3. Joe
4.
5.

Sulfuric Acid spill.

[illegible] of N.H.F. Tank.

research on the authority,

old lagoon #3 is located in the eastern end of the plant. There is no sign of dead vegetation and/or sink holes.

The old waste pile was reported in the Part A.

It contained Tailing and other non-hazardous waste.

The area of waste pile and lagoon #3 is not developed it is adjacent to the the final waste water that [illegible] plant.

A drum of Diesel fuel was on a rail cart at general drum storage area on the rail road. The facility representative informed that the cart

will be removed immediately and problem will be corrected. The case a discolored soil in the soil area where drums were stored. this was not a storage

Sulfuric Acid spill. –

Spill Acid moved out of the building over soil area of about 50 feet and followed over a concrete floor and way to the open ditch about 300' ~~[illegible]~~ south of waste water treatment plant. Then it went thru the open ditch to the City of Hastings POTW sewer system located about 500' away from the tank location.

it happened during the shut
down Period of the plat.
Plat has 3 weeks of
shut down in July every
~~year~~ year.
The acid was neutralized
by soda ash as soon it
was discovered by the
guard on the duty.
the remediation actions
neutralized the acid which
Produced (Na_2SO_4).

The spill happened on July 20, 1981.

The spill capacity was 300-500 gallons. It was reported to: National Response Center
W.V. emergency response
and city of Huntington
POTW. The city of Huntington responsed to the incident and visited the site.

The Part A application has revised number of times from Nov., 1980 to Sep., 1982

1-22-92

The groundwater monitoring wells subsurface investigations recorded by facility. This report also was submitted in 1974 and NOV 1985 to Water Resources Factor to comply with requirement of application for West Tailing Pond in the western corner of the facility.

The following documents available in the facility's head quarter:

1. Inspection records, weekly, for past (3) three years, 1989, 1990 and 1991.

2. Super fund file

3. Preventive Maintenance Program.
All the fire extinguishers were check regularly every month. All the fire extinguishers are placed in the various locations through out the plant.

EPA ID No.: KYD049946552
55

Old US 23,
[illegible], KY

Final class meeting [illegible] conducted on Jan. 21, 1992 @ 2:00 pm.

STATE OF WEST VIRGINIA
DEPARTMENT OF COMMERCE, LABOR AND ENVIRONMENTAL RESOURCES
WASTE MANAGEMENT SECTION
1356 Hansford Street
Charleston, West Virginia 25301
Telephone (304)348-5929

October 22, 1991

GASTON CAPERTON
Governor

J. EDWARD HAMRICK III
Director

ANN A. SPANER
Deputy Director

Mr. William Healy
Inco Alloys International, Inc.
P.O. Box 1958
Huntington, West Virginia 25720

Re: Facility Name: Inco Alloys, Plant
EPA ID Number: WVD076 826 015
Subject: RCRA Facility Assessment

Dear Mr. Healy:

The Division of Natural Resources, Waste Management Section (WMS) has been authorized by the Environmental Protection Agency (EPA), Region-III Office to conduct a RCRA Facility Assessment (RFA) on the above referenced facility.

The WMS has conducted the first phase of this assessment which was a desk top review of existing documents with the Section. The next phase will require meeting with facility's representatives to discuss the history of ownership and land use by Inco Alloys International Inc.

Enclosed please find a draft copy of the Preliminary Review Report for your review and response to the unknown situations. I would like to meet with you to discuss the past history of all Hazardous Waste Management Units and all Solid Waste Management Units that ever existed at the above referenced facility. I am the RCRA Permit Writer assigned to this facility, please call me at your earliest convenience to schedule a meeting.

If you should have any questions, please feel free to contact me at (304) 348-5393.

Sincerely,

A.S. Talebi, Engineer
Hazardous Waste Management Program

Enclosure

AST:sh

cc: John Humphries, EPA Region-III
Mike Dorsey, Compliance WMS
Joyce Moore, Inspector WMS

TABLE 1

Solid Waste Management Units at Inco Alloy, Inc. Facility

1. Container Storage Area, Cell No. 1
2. Container Storage Area, Cell No. 2
3. Container Storage Area, Cell No. 3
4. Container Storage Area, Cell No. 4
5. Baghouse Dust Storage Area
6. Spent Acid Storage Tank
7. Liquid Waste Treatment Tank *
8. Acid Reclaim Facility (Metals Recovery) *
9. Pickling Rinse water Pretreatment Plant *
10. West Tailing Pond Area **
11. Old Lagoon No. 1 **
12. Old Lagoon No. 2 **
13. Old Lagoon No. 3 **
14. landfill **

NOTE:

* These units are not permitted under RCRA.

** These are old SWMUs which have been closed in place.

INCO ALLOYS, INC.
HUNTINGTON, WEST VIRGINIA

Solid Waste Management Units :

SWM Units Description	**Capacity** (Pound)	**Hazard. Waste Code**
1. Drum Storage Area	100,500	D007 salt bath sludge
2. Bags Storage area	1,300,000	D007 Baghouse dust D010 selenium dust
3. Tank Storage Area	260,000	D007 Pickle Rins.sldg
4. Drum Storage Area	30,000	F001 111-TCE
5. Drum Storage Area	55,000	F002 still bottoms
6. Treatment/storage tank	454,000	D007 W.W.T. tank
7. Drum Storage Area	93,000	D007 Pickle tank slud
8. Treatment Tank	574770000	D007 Pickle rinse W.
9. Storage/Treat. Tank	2,260	D002,D007 Spent P.L.
10.Storage Tank	10212000	D002 pickle rinse W.
11.Drum Storage Area	6,200	D001 Solvent
12.Drum Storage Area	10,000	D005 Barium salt
13.Drum Storage Area	10	D009 mercury sludge
14.Drum Storage Area	1,500	F003 Mis. solvent
15.Drum Storage Area	2,500	F005 Solvents
16. Waste Pile Area	**302500 Y.**	?????

ABANDONED OR INACTIVE SITES

UNIT NAME: Lagoon No. 3

UNIT DESCRIPTION : This surface impoundment was used for storage of Wet Scrubber wastewater. The site location is known as Huntington Alloys, Inc., Huntington, Cable County, West Virginia, Latitude 82 25' and Longitude 38 22' 30".

DATE OF START UP: April, 1978

DATE OF CLOSURE: August, 1978

WASTE MANAGED: Wet Scrubber Wastewater (D007), Unknown quantity was stored, and physical state of waste was Liquid.

RELEASE CONTROLS : Unknown

HISTORY OF RELEASES: Unknown

INFORMATION NEEDS :

Photographs:

MAPS:

REFERENCES: West Virginia Hazardous Waste Survey conducted in June, 1982.

ABANDONED OR INACTIVE SITES

UNIT NAME: West Tailings Pond Area

UNIT DESCRIPTION : This unit was a surface impoundment used for storage of hazardous waste in Liquid physical state. The wastes, Neutralized Spent Acids, Alkaline Permanganate, Oxalate and Borax Coating solutions were stored in this unit with quantity greater than 300,000 pounds per year.

DATE OF START UP: 1958

DATE OF CLOSURE: 1971

WASTE MANAGED: Neutralized Spent Acids (D007, D008)
Alkaline Permanganate Solution (D002, D007).
Oxalate Solution (D002, D007)
Borax Coating Solution (D007)

RELEASE CONTROLS : Unknown

HISTORY OF RELEASES: Unknown

INFORMATION NEEDS : Information about design of impoundment

Photographs:

MAPS:

REFERENCES: West Virginia Hazardous Waste Survey conducted in June, 1982.

ABANDONED OR INACTIVE SITES

UNIT NAME: LAGOON No. 1

UNIT DESCRIPTION: This unit was a surface impoundment used for storage, treatment and disposal of hazardous waste in Liquid and solid state. The treatment was of Chemical/Physical/Bio type. The impoundment was closed in place. All the hazardous wastes were remained in the lagoon and were covered with fill. The area of impoundment was estimated to be 0.24 acres.

DATE OF START UP: 1949

DATE OF CLOSURE: 1958

WASTE MANAGED: Spent Acids (D002, D007, D008), Liquid

Alkaline Cleaning Solutions (D002) Liquid

Alkaline Permanganate Solution (D002, D007), Liquid

Lead Compounds (D008), Solid

Chromium Compounds (D007), Solid

RELEASE CONTROLS : None

HISTORY OF RELEASES: Unknown

INFORMATION NEEDS : Response to all unknowns

Photographs:
MAPS: Site topographic map

REFERENCES: West Virginia Hazardous Waste Survey

ABANDONED OR INACTIVE SITES

UNIT NAME: Lagoon No. 2

UNIT DESCRIPTION: This unit was an impoundment used for storage and treatment of hazardous waste. The status of this unit is unknown.

DATE OF START UP: 1970

DATE OF CLOSURE: 1980

WASTE MANAGED: Alkaline Cleaning Solutions (D002),
Alkaline Permanganate Solutions (D002, D007)
Oxalate Solution (D002, D007)
Borax Coating Solution (D007)
Neutralized Spent Acids (D007)

RELEASE CONTROLS : Unknown

HISTORY OF RELEASES: Unknown

INFORMATION NEEDS : Response to all unknowns

Photographs:

MAPS:

REFERENCES: West Virginia Hazardous Waste Survey

ABANDONED OR INACTIVE SITES

UNIT NAME: Landfill

UNIT DESCRIPTION : This unit was a landfill used for disposal of hazardous wastes in solid and liquid state.

DATE OF START UP: 1920's

DATE OF CLOSURE: 1964

WASTE MANAGED: Cyanide Bearing Heat-Treating Salts (F011)
Barium Bearing Heat-Treating Salts (D005)
Kolene Salts Bath, Oxalate, and Permanganate Sludges (D007)
Solvents (F001, F002, F003, F005, D001)

RELEASE CONTROLS : Unknown

HISTORY OF RELEASES: Unknown

INFORMATION NEEDS : Response to all unknowns

Photographs:

MAPS:

REFERENCES: West Virginia Hazardous Waste Survey

ABANDONED OR INACTIVE SITES

UNIT NAME:

DATE OF START UP:

DATE OF CLOSURE:

WASTE MANAGED:

RELEASE CONTROLS :

HISTORY OF RELEASES:

INFORMATION NEEDS :

Photographs:

MAPS:

REFERENCES:

ABANDONED OR INACTIVE SITES

UNIT NAME:

DATE OF START UP:

DATE OF CLOSURE:

WASTE MANAGED:

RELEASE CONTROLS :

HISTORY OF RELEASES:

INFORMATION NEEDS :

Photographs:

MAPS:

STATE OF WEST VIRGINIA
DEPARTMENT OF COMMERCE, LABOR AND ENVIRONMENTAL RESOURCES
WASTE MANAGEMENT SECTION
1356 Hansford Street
Charleston, West Virginia 25301
Telephone (304)348-5929

January 14, 1992

GASTON CAPERTON
Governor

J. EDWARD HAMRICK III
Director

ANN A. SPANER
Deputy Director

Mr. William Healy
Inco Alloys International, Inc.
P.O. Box 1958
Huntington, West Virginia 25720

Re: Facility Name: Inco Alloys, Huntington Plant
EPA ID Number: WVD076 826 015
Subject: RCRA Facility Assessment

Dear Mr. Healy:

The Division of Natural Resources, Waste Management Section (WMS) has received your letter dated January 6, 1992. We appreciate your prompt response to our requsts.

Per our previous discussion, a group of three (3) persons from the WMS staff will begin to conduct the Visual Site Inspection (VSI) on January 20, 1992. Please note that Mr. Wayne Wilson and Talal Fathallah will accompany me during our visit.

We will meet with you in your office at 9:00 am on Monday January 20, 1992.

If you should have any questions, please feel free to contact me at (304) 348-5393.

Sincerely,

A.S. Talebi, Engineer
Hazardous Waste Management Program

AST:sh

cc: G. S. Atwal, Permits
John Humphries, EPA Region-III
Mike Dorsey, Compliance, Monitoring & Enforcement WMS
Dave Moskal, Inspector WMS

STATE OF WEST VIRGINIA
DEPARTMENT OF COMMERCE, LABOR AND ENVIRONMENTAL RESOURCES
WASTE MANAGEMENT SECTION
1356 Hansford Street
Charleston, West Virginia 25301
Telephone (304)348-5929

January 14, 1992

GASTON CAPERTON
Governor

J. EDWARD HAMRICK III
Director

ANN A. SPANER
Deputy Director

Mr. William Healy
Inco Alloys International, Inc.
P.O. Box 1958
Huntington, West Virginia 25720

Re: Facility Name: Inco Alloys, Huntington Plant
EPA ID Number: WVD076 826 015
Subject: RCRA Facility Assessment

Dear Mr. Healy:

The Division of Natural Resources, Waste Management Section (WMS) has received your letter dated January 6, 1992. We appreciate your prompt response to our requsts.

Per our previous discussion, a group of three (3) persons from the WMS staff will begin to conduct the Visual Site Inspection (VSI) on January 20, 1992. Please note that Mr. Wayne Wilson and Talal Fathallah will accompany me during our visit.

We will meet with you in your office at 9:00 am on Monday January 20, 1992.

If you should have any questions, please feel free to contact me at (304) 348-5393.

Sincerely,

A. S. Talebi, Engineer
Hazardous Waste Management Program

AST:sh

cc: G. S. Atwal, Permits
John Humphries, EPA Region-III
Mike Dorsey, Compliance, Monitoring & Enforcement WMS
Dave Cunningham, Inspector WMS
Joyce Moore, Inspector WMS